1. (Once amended) A method for protecting a plant against an environmental stress, said method comprising the steps of:

- (a) providing [producing] a transgenic plant cell that expresses substantially pure DNA encoding a polypeptide that includes a [comprising a recombinant] protein kinase (PK) domain [-containing gene integrated into the genome of said transgenic plant cell and positioned for expression in said transgenic plant cell, said PK domain-containing gene being capable of increasing the level of tolerance to an environmental stress]; and
- (b) growing a transgenic plant from said plant cell, wherein said DNA is expressed in said transgenic plant, and wherein said transgenic plant has increased tolerance to an environmental stress compared to a corresponding untransformed plant [RK domain-containing gene is expressed in said transgenic plant].
- 6. (Once amended) The method of claim 1, wherein the expression of said polypeptide [PK domain-containing gene] activates the expression of a stress-protective protein-encoding gene.
- 7. (Once amended) The method of claim 1, wherein said <u>DNA</u> [PK domain-containing gene] is constitutively expressed in said transgenic plant.
- 24. (Once amended) A [transgenic] plant comprising substantially pure DNA encoding a polypeptide that includes a [recombinant] PK domain [gene integrated into

the genome of the transgenic plant and positioned for expression in the plant], wherein said polypeptide [PK domain gene is capable of increasing] increases the level of tolerance, on a plant expressing said polypeptide [PK domain gene], to an environmental stress.

5037 36. (Once amended) Substantially pure DNA encoding a polypeptide consisting essentially of a PK domain [polypeptide], said polypeptide being capable of increasing the level of tolerance to an environmental stress in a transgenic plant.

- 37. (Once amended) The DNA of claim 36, wherein said DNA encodes a polypeptide [which] that confers tolerance to dehydration.
- 38. (Once amended) The DNA of claim 36, wherein said DNA encodes a polypeptide [which] that confers tolerance to salinity.
- 39. (Once amended) The DNA of claim 36, wherein said DNA encodes a polypeptide [which] that confers tolerance to a temperature stress.
- 42. (Once amended) The DNA of claim 41, wherein said expression control region comprises a [a] promoter.